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Original Communications.

VACCINATION WITHOUT SCAR;

SCAR NOT A TEST OF THOROUGHNESS OR OF IMMUNITY.

Read before the Boston Society for Medical Improvement, Jan. 22d, 1872, by B. E. COTTING, M.D.,
Associate Member.

In the spring of 1867 (see Boston Medical and Surgical Journal, Aug. 29th, 1867), I read a paper to this Society, the object of which was, in part, to show that thoroughness of vaccination, and the protection afforded by it, depended upon an essential change wrought in the system by the disease; that this change could not be correctly estimated, nor with any exactness, by the size, peculiarities, and other appearances, or number, of the scars; and that, on observed and philosophical grounds, the then apparently prevalent belief in such a test was only a popular error.

As these propositions were somewhat strenuously contested by some members, an opportunity has been sought for ever since to demonstrate them.* At length, after much effort, many disappointments, and the assumption of considerable personal responsibility, such an opportunity has been secured; and the results are sufficiently decisive, it would seem, to remove all doubt in the matter. Although the erroneous idea appears to have been given up pretty generally hereabouts, and, in the present vaccine panic, seems to be wholly abandoned in practice by its former advocates, it is worth while that the question should be settled once for all if possible. If a single case can be found of thorough vaccination with complete immunity without any scar at all, then, however valuable as a proof of previous vaccine disease, the necessity of a scar of particular form and peculiarities to secure thoroughness or immunity is no longer

tenable, and the doctrine of such a test must be abandoned.* Such a case we now have through an experiment devised by myself, and faithfully carried out in its details by Dr. J. Henry Davenport, of this city. I give the account in his own words:—

"The following is a history of the experiment I have performed at your suggestion.

"Nov. 21st, 1871.—*x*, aged about 12 years, a healthy and hearty boy who had never been vaccinated, was obtained for the proposed trial.

"A drop or more of pure virus, from a boy 14 years old on the 8th day of normal vaccinia, was drawn into the long needle-pipe (about two inches long) of an ordinary subcutaneous syringe, which had been tried previously with another drop and its trustiness proved. The outside of the needle was then cleaned with an aqueous solution of carbolic acid (one part to twenty), and carefully washed and wiped off, in order to free it from any virus that might possibly adhere to the outside. The needle, thus cleaned and containing a drop or more of pure virus inside, was passed with an upward direction its full length under the cutis in front of the biceps of the left arm—so that the point of deposit should be as far as possible from the puncture. When thus well imbedded in the areolar tissue only, its contents were discharged. After this, the needle, lying flat under the skin, was turned round over a considerable angle and moved about so as to secure a thorough subcutaneous wiping of the point, and then rapidly withdrawn. No blood followed; and the prick was to be seen only with difficulty.

"Nov. 22d, 2d day.—A slight deep-seated hardness at the point of deposit about the size of a bean, such as follows most

* "Cui Bono?"
Truth is weakened by any addition of error.

"Truth will always be more confirmed and extended by a conscientious indication of those points which are hypothetical."—FLEUCHTERSLEBEN, *Med. Psych.*

"A miserable, flat, white speck or two, which no medical man who knows anything of smallpox can regard as protective."—*London Med. Times and Gazette*, February, 1867.

"Unless the characteristic mark of primary vaccination be distinct and satisfactory, it is prudent," &c.—*Circular of York and Lincoln Branch of British Medical Association*.—*British Medical Journal*, March, 1872.

subcutaneous injections of medicine. No indications of inflammation.

" Nov. 23d, 3d day.—Same as yesterday.

" Nov. 24th, 4th day.—No increased swelling. No tenderness in axilla. No loss of appetite. No symptoms of constitutional disturbance.

" Nov. 25th, 5th day.—Swelling (lump rather) is smaller.

" Nov. 26th and 27th.—No change.

" Nov. 28th.—Complains of itching.

" Nov. 29th, 9th day.—Swelling enlarging. The immediate neighborhood very slightly reddened. The blush extends over a space a little larger than a silver dollar.

" Nov. 30th, 10th day.—Swelling as large as a small horse-chestnut; seems deep seated and imperfectly connected with the skin, which is suffused with a blush about three inches long by two wide. Axilla tender. Tongue shows a thin white fur.

" Dec. 1st, 11th day.—Did not sleep well last night. Had headache. Was feverish. Pulse accelerated.

" Dec. 2d, 12th day.—Swelling decreasing. Blush scarcely to be seen. Constitutional symptoms have all greatly abated.

" Dec. 3d, 13th day.—Same as yesterday.

" Dec. 5th, 15th day.—Swelling smaller. Feels soft. Pus was feared to be forming—none formed however.

" Dec. 8th, 18th day.—No material change.

" Dec. 10th, 20th day.—Swelling almost entirely disappeared. *Arm shows no sign whatever of any scar.* Any experienced person would suppose that the boy had never been vaccinated.

" Dec. 30th, 40 days after vaccine injection, *x* was thoroughly re-vaccinated, and a drop of clear virus put into and allowed to dry in some fresh scratches made by a lancet.

" Jan. 1st, 3d day.—No swelling or itching. The wounds look like any similar cuts a day or two old.

" Jan. 2d.—No change; Jan. 6th, 8th, the same.

" Jan. 11th, 13th day.—Not taken.

[" Jan. 25th, 27th day after re-vaccination, *x* was again re-vaccinated.

" Jan. 27th, 3d day.—Some itching and redness—sore.

" Jan. 28th, 4th day.—Redness a quarter of an inch in diameter.

" Jan. 29th, 5th day.—No swelling in axilla, nor other constitutional symptoms.

" Jan. 30th, 6th day.—Redness and sore gone.]

It will be seen by this case that, after injection of the virus beneath the true skin,

the vaccine disease progressed as regularly as when introduced in the ordinary way. On the 9th, 10th, and 11th days, there were the areola, swellings, and constitutional symptoms in due order. At one time, especially on the 15th day, there seemed to be some fluid present—as though there had been a subcutaneous vesicle, passing through the purulent stages. By the 20th day, the disease had completed its "series of processes;" but left *no scar*, nor trace behind.

That there was complete immunity against subsequent vaccine disease was clearly shown by the thorough re-vaccination twenty days afterwards, or forty days after the first subcutaneous vaccinal puncture.

[Since this paper was read to the Society, a second re-vaccination, twenty-seventh day after the first, having the usual appearances of ordinary re-vaccination, pustule, redness, &c., without "taking," gave additional confirmation of the thoroughness and immunity of the primary subcutaneous *scarless vaccination.*]

Variolous inoculation, "the only proper test," according to a Report of the British Provincial Association, though suggested, was not to be allowed in this case.

In the paper of 1867, it was shown that whether the scar resulting from vaccination as usually performed be large or small is an incidental circumstance merely, dependent upon the amount of cutis destroyed by ulcerative processes not essentially peculiar to vaccine disease; and now, by the experiment just described, we have a complete demonstration that a scar is not absolutely necessary to perfect vaccine disease or its protective power.

Two other persons were vaccinated subcutaneously, but were afterwards found unsuitable for full experiment, though the results are not without interest. To continue Dr. Davenport's account:—

" Dec. 8th.—*y*, aged 33, vaccinated subcutaneously as before described.

" Dec. 11th, 4th day.—Swelling of the size of a small fiblet, deep and under the skin. No tenderness in axilla. Arm itches a little. No redness or other symptoms.

" Dec. 13th, 6th day.—Swelling subsiding.

" Dec. 15th, 8th day.—No appearances. Now states that when she said that she had not been vaccinated, she meant during the present epidemic!

" Dec. 30th.—*z*, aged 12 years, vaccinated subcutaneously.

" Jan. 8th.—No appearances. Now admits a mistake, and says that he was vaccinated several years ago."

In both these cases there was nothing to be seen subsequently, save the minutest point where the needle penetrated. It was ascertained, later, that both had been properly vaccinated, though the marks now pointed out are equivocal. These cases show, however, that subcutaneous re-vaccinations may not be unlike many other re-vaccinations performed in the usual way, in general nugatory features and results; and are recorded here chiefly to show this, and the comparative harmlessness of the subcutaneous operation. The last was not so clear previous to the trial, and the responsibility, in case of untoward event, had to be fully assumed at the outset.

It is certain, however, that in the first case the boy *x* had never been vaccinated previous to our experiment. To his case, therefore, no exceptions can be taken.

These are the only instances where subcutaneous vaccination has as yet been permitted; but now that it has proved to be unattended by disagreeable results, the experiment can be repeated, without risk, by others who may incline to try it for additional confirmation of the fact now established.

EPILEPSY FOLLOWING INJURY TO THE HEAD.

Read at a Meeting of the Suffolk District Medical Society. By I. H. HAZLETON, M.D., Boston.

On the evening of Friday, Sept. 8th, in New York city, —, a young man 22 years of age, weighing about one hundred and forty pounds, fell upon the floor, from a height of nine feet, striking upon the back and left side of his head. He was insensible over twenty minutes. Vomited on recovering consciousness; body cold; pulse, about an hour after, 32. There was no paralysis, nor trouble with any of the special senses. There was a large ecchymosis over the left mastoid process, without any signs of fracture of the bones of the head. In a fortnight, he had so far recovered as to return to his store, gradually resuming work, and feeling about as well as ever.

About the 10th of October, he began to have a cough without any expectoration, loss of appetite, night sweats, vertigo, and pain in the head, which he thought was occasioned by the severity of his cough. When in bed, was not troubled with vertigo, and cough was less severe. His stomach could not tolerate much food. There was a slow but steady progress in the severity of his symptoms.

I saw him Sunday morning, Oct. 22. He was in bed, a little emaciated, eyes lustrious, pulse 88 and soft; tongue moist and clean; bowels regular. He complained of cough and of being light-headed. Could only eat simple food. The cough was dry, frequent and paroxysmal. Could not detect any physical signs of lung trouble. He said that the night sweats varied in quantity. As he was unwilling to go to any of the hospitals, and could not receive proper attention at his boarding-place, he concluded to come to my house for treatment. We left New York Oct. 24th in one of the Fall River boats. He remained in his room till we took the cars. Was but very little fatigued by the journey, and appeared better the next day, but was advised to keep his room. The syrup of iron, quinia, and strychnia, one teaspoonful twice a day was prescribed.

On Saturday, Oct. 28th, he began to be dull and depressed. In the afternoon, his face was flushed; head hot; pulse 96, full and bounding; tongue clean, but less moist. There was perceptible throbbing of carotids. Said that his head did not ache. Discontinued the syrup, and gave simple fever drops. At 11.30, P.M., went into his room and found him unconscious, on his left side, with the left arm extended, hand clinched, head drawn to the left, eyes rolled up and drawn to the left. There were slight convulsive movements of the right side. In a few minutes the whole body was convulsed, the right side more than the left. The pupils were widely dilated. There was the same turning towards the left. No protrusion of the tongue. No involuntary discharge of urine or faeces. Near the end of the attack, there was twitching of the face, which continued some time after the other convulsive movements had ceased. From the commencement of the attack till after all spasmodic action had disappeared was about fifteen minutes. The body was bathed in perspiration. He then went into a deep sleep. Twenty minutes after, he had another seizure of the same character, but much less severe, and of shorter duration. Gave a solution of bromide of sodium (gr. x.) twice during the night.

When he awoke in the morning, he said he had had another one of his night sweats, and thought it was worse than any of the others. At stool he was much amused by the twitching of his left leg. Solution of bromide of sodium (gr. v.) four times a day was ordered. The next day, noticed that he used left arm but very little, and was more or less helpless, and found that both the arm and leg of the left side were para-

lyzed—the arm more than the leg. Sensibility was much diminished, equally on both sides. The temperature was not taken, but appeared, by hand, to be a little more elevated upon the left side than upon right. The cough was unchanged, but continued to give him much uneasiness.

Nov. 2d, at 4.30, A.M., while asleep, with no premonitory cry, he had slight clonic spasms of the left side (the body being turned as in previous attack). They did not follow as rapidly and lasted nearly ten minutes, gradually involving both sides, but the right side more than the left. Unconscious during both of these stages, which continued nearly twenty-five minutes. About five minutes after, the respiratory muscles were convulsed, making respiration nearly one hundred per minute. This third stage lasted a little over ten minutes, during the whole of which he was conscious, begging me to "give him something to relieve him or he would die." Gave him twenty-five grains of bromide of sodium after the spasms began to be less severe. The whole attack lasted about fifty minutes.

A blister was applied to the back of the neck, and solution of bromide of sodium (gr. xx.) pro re nata (the indications being the rapidity of the pulse, and the increased temperature) was ordered, the head being kept cool by evaporating lotion. In the evening, had an attack of twitching of the paralyzed side, much less severe than the one in morning; was unconscious during the whole of the fit. There was less perspiration, although large in quantity. When he awoke, he asked if he had not been having another spell like the one in the morning, and if his night sweats had not been all along occasioned by fits. The paralysis was more complete after this attack. The cough unchanged, causing great pain in head.

Nov. 4th.—Dr. Webber saw him in consultation. The paralysis had so far improved that he was able to flex the forearm and fingers a very little, but could not extend them. The left hand was slightly edematous, possibly from dependent position. Could bend the leg a little. There was no facial paralysis. The pupils were normal, responding to the stimulus of light, a little sluggishly, however. The tongue was protruded and drawn in, sometimes in a straight line, and sometimes not. When protruded, there was slight trembling. It seemed to be a little full on the right side. He has good control over the muscles of deglutition. There was a slight secretion from the eyes. Of the five special senses,

that of touch seemed to be the only one affected. There was a marked loss of sensibility on both sides. He could distinguish a touch or pinch, but thought we were pulling hairs when using the aesthesiometer with some little force. The two points were felt as one at a distance of two and a half inches across the arm. All mental phenomena were sluggish, but normal. The solution of bromide of sodium to fluid extract of ergot (m. xx.). After the administration of the first dose, an erythematous blush began to appear upon the face. Soon after the second dose he vomited. The ergot was discontinued, and the solution of bromide of sodium was resumed.

Nov. 5th.—Began to be troubled with severe tonsillitis, with strawberry-looking tongue. In the evening, had epistaxis from the left nostril. There was a slight diarrhoea, which lasted for five days. The appetite and strength began to fail. Slept a great deal, talking often in his sleep.

Nov. 9th.—Had hallucinations of sight after awaking, but could correct the false perception. Slept most all day, breathing heavily. Tonsilitis almost well. Cough still present, not so troublesome as formerly.

Nov. 11th.—His left arm was flexed. On attempting to straighten it, he cried out that it hurt him. His condition would fluctuate from comfortable—with good pulse, quiet sleep, and no hallucinations—to quite low, when the pulse would be small and very rapid, the sleep heavy, free perspiration, the hallucinations frequent and a longer time elapsing before they were corrected.

Nov. 22d.—Incontinence of urine, when asleep, appeared and continued for three or four days. Always dreamed he was on board a yacht and was wet by the spray.

Dec. 2d.—The pulse was small and 120. Only a slight cough. No profuse sweating. After unpleasant dreams he would try to get out of bed, but a solution of hydrate of chloral (gr. x.) would quiet him in a few minutes. Milk punch (whiskey 3 ss.) was administered four times during the day, and the pulse was found to be less frequent. Continued treatment through the night and for three days after, gradually decreasing the quantity of whiskey as the pulse improved, till the fifth day, when it was discontinued. He improved slowly from this time, recovering the use of the left arm and leg; sensibility returned on both sides. On January 25th, 1872, the day he left me, the index of the dynamometer marked 80°

when the right hand was used; 63°, when the left.

The mental phenomena during his illness were very interesting. Until after the severe convulsions of Oct. 28th, the mind was unaffected; then a little more time was required for him to collect his thoughts and answer. But his answers were always correct. He gave the number of his Post Office box in New York when he appeared to be quite stupid. At one time I believed it was almost impossible for him to live, and requested him to sign some checks, payable to his only sister, for the whole of the money he had deposited in different banks. He seemed to understand why I desired this, consented, and laughed when he found he was no longer able to write, but had to make his mark.

After Nov. 9th the hallucinations of sight became more frequent, but always after awaking from sleep. When awake for any length of time, nothing but sluggish mental action was noticeable. After sleep, however, and whilst awaking, he would have hallucinations of sight, hearing and touch, and delusion later on. All of these he could correct with the assistance of his nurse. The moment his mind was drawn to any other subject for a short time, he was able to correct his delusions. After he was able to walk out, he had a faint remembrance of two or three things only that occurred subsequent to Nov. 2d. When the money orders were handed to him he was much astonished, remembering nothing about them. It is very interesting to the medical jurist to note that the memory was so little impaired during the progress of the disease; that he seemed to understand everything that was said to him, and could also converse correctly, but forgot everything that happened after he had recovered.

HYDRATE OF CHLORAL IN RIGID OS-UTERI IN A CASE OF MISCARRIAGE.

By M. L. BROWN, M.D., Winchendon.

Mrs. ——, a well-formed and muscular woman, primipara, miscarried at about the fourth month. I was called at 4 o'clock, A.M. The miscarriage had been in progress for three days and the waters had passed away the day before. On examination, the vagina was found hot, though somewhat moist, and the os was too small to admit the tip of the fore-finger; it felt hard, and gave a sensation as if bound

round with whip-cord. At the end of two hours, the pains coming regularly and increasing in strength, another examination was made, when I found the same condition as at first. At 8.30, A.M., no progress having been made, I gave one-third of a grain of sulph. morphia, as in labor at full term; I have several times seen the best results from giving an opiate when the pains were strong and the os rigid and unyielding. At 11, A.M., there was no change, all the while the pains occurring regularly every five minutes. I then gave two grains of opium, but with no effect towards dilating the os, though it materially increased the strength of the pains. At 1.30, P.M., applied the extract of belladonna after the manner of Prof. P. Dubois (a pellet of the extract the size of a pea on the nail of the index finger is carried to and applied upon the os uteri). Towards evening, as this had produced no result, several applications of very warm water were made, by means of vaginal douches, with the effect to soften and cause the os to dilate so as to admit the finger. After this, no perceptible progress was made, and I thought of incising the os. The pains had become more frequent, powerful, and were agonizing, and the patient complained of great fatigue, a feeling of complete exhaustion, was very thirsty, had severe headache, the tongue was dry, brown and burning, the abdomen was tender on pressure, and the pulse was hard and frequent.

Having some hydrate of chloral at hand, I gave her forty grains in half a glass of sweetened water; very soon after, she passed into a quiet and refreshing sleep. Slept an hour and a half, when she awoke, and immediately after it was discovered that the foetus was in the bed; slight traction was made upon the slender cord and the placenta was drawn from the vagina. The uterus was found firmly contracted; the tongue was moist, and the headache was gone. The patient made a very quick and perfect recovery.

Reports of Medical Societies.

RHODE ISLAND MEDICAL SOCIETY.

THE quarterly meeting of the Rhode Island Medical Society was held March 20th, in the Franklin Society rooms, on North Main Street, and was quite largely attended.

Dr. Geo. L. Collins, President, occupied the chair, and called the meeting to order at 11 o'clock.

Dr. O. C. Wiggin, delegate elect to Vermont Medical Society, was changed to New Hampshire, and Dr. O'Leary appointed to Vermont.

Dr. C. W. Parsons, corresponding secretary, read the following resolutions from the "Association of Medical Superintendents of American Institutions for the Insane," and after a few favorable remarks from Dr. Sawyer, Superintendent of Butler Insane Asylum, the resolutions were adopted, on motion of Dr. J. H. Eldridge, of East Greenwich:

Resolved, That in view of the frequency of mental disorders among all classes and descriptions of people, and in recognition of the fact that the first care of nearly all these cases necessarily devolves upon physicians engaged in general practice, and this at a period when sound views of the disease and judicious modes of treatment are specially important, it is the unanimous opinion of this association that in every school conferring medical degrees, there should be delivered, by competent professors, a complete course of lectures on insanity and on medical jurisprudence, as connected with disorders of the mind.

Resolved, That these courses of lectures should be delivered before all the students attending these schools; and that no one should be allowed to graduate without as thorough an examination on these subjects as on the other branches taught in the schools.

Resolved, That in connection with these lectures, whenever practicable, there should be clinical instruction, so arranged that, while giving the student practical illustrations of the different forms of insanity, and effects of treatment, it should in no way be detrimental to the patients.

Resolved, That a copy of these resolutions be sent by the Secretary to the American Medical Association, the Dominion Association and Ontario Association, of Canada, to each State Medical Society, and each Medical College in the United States and British Provinces.

JOHN CARWEN,
Sec. Assoc. of Medical Superintendents of

American Institutions for the Insane.

The President announced the receipt of several pamphlets containing directions for vaccination, also copies of the report of the case of the American Medical Association against H. A. Martin, M.D., of Boston, sent by Dr. Martin for distribution among the members of the Society.

On motion, the President appointed Drs. Mann, Morton and Parsons a committee to nominate delegates to the annual meeting of the American Medical Association, to be held in Philadelphia the first Tuesday in May.

Dr. W. O. Brown, of Providence, next read a paper on the subject of "Certain Vaguely Defined Uterine Affections," detailing some interesting cases occurring in his own practice.

Dr. C. T. Gardner, of Providence, then read a paper on the subject of some of the needed reforms in medical societies, the appointment of coroners, and the examination of experts in courts of law. The paper was an ably written one, and was received with applause at its close. The paper was afterwards discussed by Drs. Brown and Gardner.

Dr. A. R. Becker spoke on Dr. Brown's paper, differing with the author in some of his positions, and the matter was also discussed by Drs. Gardner, Becker, Wiggin and others.

Dr. Becker called attention of the Society to the "Bromide of Calcium," which he had used in his practice very successfully as a hypnotic, and described cases in which he had given it with great benefit.

Dr. Sawyer said he also had used it at the Butler Asylum beneficially, but not a sufficiently long time to report satisfactorily upon its use.

The following named members were elected as delegates to the American Medical Association—:

Drs. Collins, Sawyer, Becker, W. H. Traver, Providence; Morton, Pawtucket; King, Newport; Bullock, Warren; Kenyon, Coventry; Gavin, Lonsdale; Edwards, Woonsocket.

Dr. O. C. Wiggin, of Providence, presented a case of perforation of the stomach by ulceration, illustrated by a well-preserved specimen of the diseased stomach, with an interesting account of the progress of the case, which occurred in his practice.

Dr. J. H. Eldredge, of East Greenwich, read an able paper on the subject of "Placenta Prævia, or unavoidable Uterine Haemorrhage." After a general presentation of the subject, Dr. E. gave full and detailed reports of seven cases which had occurred in his practice during the past fifteen years.

Dr. Timothy Newell, of Providence, introduced a female patient of his, suffering with a pulsating tumor on the right side of the neck, and her case was examined with the stethoscope by most of the physicians present.

The Committee on Publications were instructed to print as many copies as they may deem advisable of the proceedings of the Society; also of a condensed report of the transactions since 1864; biographical sketches of members deceased since that time, and of the medical papers which have been read at meetings of the Society.

Dr. F. H. Peckham, Jr., of Providence, presented the following resolution, which was read and passed:—

Resolved, That a Committee of three be appointed by the President to examine and report upon the expediency of applying to the General Assembly for an amendment to the laws in regard to the appointment of coroners.

Dr. W. O. Brown, of Providence, described his method of preparing vaccine virus for vaccination, by pulverizing the crust from the pustule and dissolving it in glycerine and water, using it with good effect. Dr. Collins differed with him, and preferred in all cases to use the pure lymph from the pustule.

The meeting was then adjourned until Wednesday, June 12th, the time of the annual meeting, at the same place.

LYNN MEDICAL SOCIETY. J. O. WEBSTER, M.D.,
SECRETARY.

DEC. 6th, 1871.—Dr. Galloupe reported several cases.

1st. *Operation for Harelip* in a child less than three days old; the worst case of single harelip he had ever seen. The child was fed with mother's milk, which was drawn with a pump. Pins removed in forty-eight hours; wound dressed with lint dipped in collodion, which was not well kept on, but the result was perfect. Dr. G. has notes of twenty cases operated on from three days to one year of age, and does not see that age influences the result.

2d. Two cases of *Paralysis of Musculo-spiral Nerve* after fracture of humerus. In each there was complete paralysis of extensors and supinators of hand, persisting for six months.

3d. *Compound Fracture of Radius into Elbow-joint*.—Case of an intemperate man who had a load of stone, of four tons' weight, pass over his elbow, fracturing the radius and opening the joint. No splints could be applied; still he got well in about three weeks and has a good arm, with perfect use of elbow-joint. Carbolic-oil dressing. Dr. G. thought that drunkenness sometimes seems to have little effect on the repair of injuries. He had a fracture

of femur in a drunkard, followed by delirium tremens for five weeks, still there was good union.

Dr. Breed suggested that intemperate habits have little effect, in this respect, on those who lead out-of-door lives.

Triplets.—Dr. Drew reported a case of triplets at 6½ months. All presented in first position of head. Interval from first to second, twenty minutes; second to third, thirty minutes. All lived about twenty-four hours. Placenta single and very large.

Croup; Tracheotomy.—Dr. Cahill reported, in detail, a case of croup in a little girl of three years. After various treatment with no avail, the patient being nearly suffocated, and, in his opinion, not likely to live for two hours, he proposed tracheotomy, which was assented to. He etherized the patient, cut down on the trachea slowly and carefully, hooked it up and divided three rings, and introduced a gutta-percha tube. The patient, after a short struggle, breathed as though nothing was the matter, drank a glass of milk, and immediately went to sleep for the rest of the night. The patient seemed to be doing well for thirty-six hours, then the respiration began to be again laborious; she grew rapidly worse for twenty-four hours and died. Dr. C. expressed himself as pleased with the operation, as, though it did not save life, it prolonged it and gave the little sufferer two nights of tranquil sleep.

Jan. 3d, 1872.—It being the annual meeting, the Society proceeded to the election of officers, with the following result:—J. M. Nye, President. J. O. Webster, Secretary. J. G. Pinkham, Treasurer and Librarian.

On motion of Dr. Galloupe, the thanks of the Society were unanimously voted to Dr. Daniel Perley for the prompt and efficient manner in which he has performed the duties of President for the five years of the Society's existence.

Measles and Scarlatina combined.—Dr. Emerson reported a case in which the symptoms and eruption of measles were well marked. On the third day of eruption, the sore throat and rash of scarlatina appeared and ran their course. The child was dismissed from treatment in about a fortnight.

Gun-shot Wound of Chest; Ball removed after 7½ Years.—Dr. Galloupe reported the case of a man who was wounded, before Petersburg, June 17th, 1864, the ball entering his chest an inch and a half to the right of median line and three inches below top

of sternum, fracturing two ribs. It then passed backwards and to the right, through the lung, and lodged in the right axilla. Remained in hospital until the 17th of the next September, when he returned to duty. Soon after being wounded he had haemoptysis, and fourteen months afterwards coughed up a piece of his shirt. The missile could, from the first, be plainly felt in the axilla. He had been examined by many (18) surgeons, all of whom thought it best not to meddle with it. As he was anxious to be rid of the bullet, Dr. G. cut down and removed it, Dec. 22d, 1871, without injuring any important part. The ball was so flattened that it was impossible to tell what was its original shape, and several bits of bone were lodged in the depressions on it. The man is in perfect health.

Puerperal Fever.—Dr. Pinkham reported a fatal case of puerperal fever, to which he was called ten days after confinement. The physician who attended her in labor was, at the same time, attending a case of smallpox. Might there be an etiological connection between the two diseases?

Puerperal Pelvic Peritonitis.—Dr. Pinkham reported this case, primipara, 27. The labor was lingering, and was aided by stimulating drinks, external pressure and ergot, and was completed with forceps. Placenta was adherent, and on its removal, while the patient was still etherized, flooding took place, but was controlled by pressure, ice and ergot, with little loss of blood.

Two days later, the patient had symptoms of fever, but no pain or tenderness of abdomen. Later, there was a little pain. After a few days, symptoms continuing, a digital examination was made. The uterus was found immovable and the roof of the pelvis hard. Pelvic peritonitis was diagnosed. The patient is now recovering.

Domestic Surgery.—Dr. Pinkham also reported this case. A man who experienced difficulty in sexual intercourse from the shortness of the frenum, divided it with a pocket knife. He came to the doctor with profuse haemorrhage from a divided artery.

FEB. 7th. *Puerperal Convulsions.*—Dr. Nye reported the case. Patient at 21, seven months pregnant, had been going on well until recently. Had been imprudent in exposing herself to the weather, and for several days had had swelling of limbs, headache and dimness of vision. Convulsions began on the night of Jan. 17th. A homœopath was called in the morning, who left some medicine, which produced no effect. He did not call again.

Dr. N. called at 3, P.M., and took a pint

and a half of blood from the arm; gave of morphia one third of a grain hypodermically; brom. potass. gr. xx., and an enema. No labor pains or dilatation. Being unable to be out in the night, he transferred the case to Dr. Pinkham.

Dr. P. reported that he arrived at 8.30, P.M. Patient was restless, and had had two convulsions since Dr. Nye's visit. Gave chloral grs. xx. per enema, and, later, induced labor by injection of water and the use of a sponge tent. Drew urine, which was heavily loaded with albumen. Repeated chloral, grs. xx., at 10.30 and 12.15. Child born, dead, at 1.15. Patient slept until 5, A.M., and awoke conscious, but unaware of what had happened. Recovery complete in a few days.

Dr. Nye said he had had six cases of puerperal convulsions in a year. Four were bled and lived; the two that were not bled died. The effect of bleeding was very marked in this case.

Dr. Ahearn said he had had three cases, all recovering without bleeding. The first was readily controlled by ether, the second by chloral. In the third chloral had no effect, and he successfully resorted to the inhalation of a mixture of chloroform and ether, equal parts.

Dr. Perley reported a case in which he expected convulsions, the patient being a little dropsical, and wished to bleed, but the patient was so unmanageable that it was impossible. As soon as convulsions began he gave ether and delivered with forceps. Considerable flooding. One convulsion only after delivery.

Puerperal Mania, Treated with Chloral.—Dr. Webster reported, in detail, a case of ante-partum puerperal mania, in the ninth month. The patient had been married but one month, and the attack was attributed to the mental anxiety from which she had suffered. She had already been treated with opium and camphor and small doses of chloral, without much effect.

Chloral hydrat was administered in doses of 15 grains every twenty minutes until she became quiet, and was afterwards given, pro re nata, the whole amount taken being, in the first twenty-four hours, 113 grains, second 90 grains, third 30 grains, fourth 30 grains. There was no recurrence of the mania at confinement, which occurred at term.

Secondary Umbilical Haemorrhage.—Dr. Pinkham reported a case of haemorrhage from the umbilicus which will be published in full at a future time.

MARCH 20. *Case of Injury.*—Dr. Gal-

loupe reported the case of an old, dissipated man, whose ankle was run over by the cars. Amputated a little below the knee. He did well for three days; on the fourth, mortification began at the hip and extended upward and downward, proving fatal in twenty-four hours. There had been no injury to the hip.

Tedious Labor.—Dr. Galloupe reported a case of labor in which, when it had lasted seventy-two hours, the os was only dilated enough to admit the finger, and there seemed to be no pressure from above, although the pains were strong all that time. He finally ruptured the membranes, when the head immediately descended and the labor went on rapidly, but the pains afterwards died away and it had to be completed with the forceps.

Malformation.—The child, in the above case, was healthy, but curiously malformed, having a large scrotum with a small hole in the middle of the front; there was no penis in sight, and the child urinated through the hole. The scrotum contained testes and penis, the urethral orifice of the latter being evidently attached to the hole in the scrotum.

Hour-glass Contraction.—Dr. Perley reported the case. After delivery, he waited some time for the delivery of the placenta, which he could not reach with the finger. Much flowing occurred. He finally introduced his hand, and had to force it through a stricture in the middle of the womb to find the placenta, which was imprisoned in an upper chamber, and adherent. The cord was very short and twisted around the child's leg. The contraction was perhaps produced by the cord being dragged upon during labor.

In answer to a question, Dr. P. said that ergot was administered after the child was born, while waiting for the placenta.

of the evils usually to be encountered in a passage across the Channel. When we remember that not half a century ago, people, after waiting days or perhaps weeks for fair wind and weather, were glad to consider a voyage of six hours of tossing and sickness as a very favorable one, one can hardly understand how the present generation feel it unendurable to submit to a single hour and a half after having started at a given time. Though, however, we must admit the fact that we are less brave in meeting discomforts than our predecessors, there is still satisfaction in diminishing those discomforts to the utmost in our power.

We have seen the futility of various childish devices, such as stimulants, globules, ice-bags, &c., all of which, not being based on any true knowledge of the evils to be met, are merely empirical. Rejecting all of these, therefore, it will be well to invite attention to a scientific explanation of the cause of sea-sickness, and to base on that explanation a proposal for a remedy.

A suggestion was made sixty years ago, by Dr. Wollaston, that sea-sickness proceeds from pressure of blood upon the brain; and this view is supported by pathological observations, since injury or pressure on the brain is almost invariably attended by vomiting, which is its earliest symptom. Dr. Wollaston explains the way in which pressure is induced upon the brain during the motion of a ship at sea, by reference to the action of mercury in the tube of a barometer. He says "that if a barometer be carried out to sea in a calm, the mercury will rest at the same height as when on shore; but when the ship falls by the subsidence of the waves, the mercury is seen apparently to rise in the tube which contains it." I may add to this, that anyone who has carried a mountain barometer, and has happened to let it descend suddenly, must have been sensible of a concussion of the mercury against the top of the tube, and must have felt and heard the blow. In fact, the mere action of walking is sufficient, by the alternate rise and fall of the hand to produce this effect. Dr. Wollaston considers that the action of the blood on the brain, at the moment of the descent of the ship, is identical with that of the mercury on the top of the barometer, and that there is an actual pressure, and even a blow, which, by frequent repetition, produces nausea and vomiting. Now it is to be regretted that Dr. Wollaston does not state the true scientific explanation of the apparent rise of the mercury in the barometri-

Selected Papers.

SEA-SICKNESS, AND SOME OF THE MEANS OF RELIEVING IT.

By Sir JAMES ALDERSON, M.D., D.C.L., F.R.S., &c.

The cause of sea-sickness and its possible amelioration is a subject particularly appropriate at the present time. It is more agreeable to offer suggestions for relief than to comment on the sybaritic weakness which is generally displayed in impatience

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cal tube, to which inaccuracy may possibly be referred the reason why so little notice has been taken of this valuable suggestion. It is not necessary here to analyze his statement with a view to refute it. The fact is undeniable, that contact does take place between the mercury and the upper part of the tube with more or less violence, and the proper explanation of the apparent rise of the mercury when the tube descends is this: that when the rigid tube falls, the mercury, having its own inertia, and not being attached to, or a part of, the tube, remains stationary—at least for a time; thus the tube is pushed down upon or over the mercury, and the concussion takes place. Exactly the same occurs between the brain and vessels on the one part and the blood on the other. The approximately rigid brain and vessels are carried downwards, the blood remains by its own inertia, and the consequence is to crowd blood into the vessels of the brain, and so press with increased force, producing a certain shock; this shock and the attendant pressure produce sickness and vomiting. The vomiting thus induced is of a peculiar character—very different from that proceeding from a common disordered stomach; it occurs in a spasmotic manner, and violent retching remains after the contents of the stomach have been ejected. This continuous retching seems to indicate the repeated action of the increased pressure.

Referring to the experience of sufferers from sea-sickness, it is admitted by all that they are most sensible of the miserable feeling at the moment of the descent of the ship. They are also conscious at that particular time of an instinctive effort to sigh or take a deep inspiration, the meaning of which is manifest. During deep inspiration the chest is dilated for the reception of air, and its vessels become more open to admit blood, so that a return of blood from the head is then more free than at any other period of complete respiration; whilst, on the contrary, by the act of expelling air from the lungs, the ingress of blood is obstructed. This obstruction is proved by observation when the surface of the brain is exposed by the operation of trephining; a successive turgescence and subsidence of the brain is then seen in alternate motion with different states of the chest. A deep inspiration, therefore, at the time of the descent of the ship tends to counteract the turgescence of the brain.

Sickness is sometimes produced by waltzing. In this case the same theory of pressure on the brain holds good; but during

rapid gyration in waltzing the blood is acted on differently: it is centrifugal force which causes the blood to rise in the vessels supplied to the brain. There is an additional cause of cerebral disturbance from the confusion of objects rapidly presented to the eye; from this comes giddiness.

In reference to sickness brought on by swinging, I cannot do better than quote Dr. Wollaston: "Sickness by swinging is evidently from the same cause as sea-sickness, and that direction of the motion which occasions the most piercing sensations of uneasiness, is conformable to the same explanation already given. It is in descending forwards that this sensation is perceived, for then the blood has the greatest tendency to move from the feet towards the head, since the line joining them is in the direction of the motion; but when, in the descent backwards, the motion is transverse to the line of the body, it occasions but little inconvenience, because the tendency to propel the blood towards the head is then inconsiderable."

This last observation of Dr. Wollaston, quite accurate as to the result, plainly suggests the practical bearing of the subject. Knowing the mode in which the ship's movement acts on the brain, we are at once furnished with the only rational way of averting sea sickness.

The first point is wholly to avoid the upright posture. Every one knows that it is a common practice to lie down, and this is done almost instinctively, but it is also known that to do so, though frequently successful, is not invariably so. The way in which the motion in a swing affects the brain affords the proper explanation why lying down is not invariably successful; and shows that it is necessary, not only to take a recumbent position, but to lie in the right direction. A person lying down with the feet towards the bows of a ship is, whilst it descends in pitching, in the same position as a person in a swing descending forwards, in which case we have seen that sickness is produced by blood being forced upon the brain. On the contrary, a person lying down with his head towards the bows is, during the descent of the ship, in the position of one descending backwards in a swing, in which case the pressure by the blood will be towards the feet, and, therefore, relief rather than an inconvenience will be experienced, the tendency being to reduce the natural supply of blood to the brain. It is necessary, not only to lie down, but to do so with the head to the bows; and it is highly desirable that this position

should be assumed before the ship begins to move. There is a secondary advantage to be gained by closing the eyes, and so shutting out the confusion arising from the movement of surrounding objects.—*British Medical Journal.*

Medical and Surgical Journal.

BOSTON: THURSDAY, APRIL 25, 1872.

THE USE OF TEPID BATHS IN THE TREATMENT OF FEBRILE DISEASES.

In the *Annales et Bulletin de la Soc. de Med. de Gand* are given, at some length, the results of a series of experiments by M. Schützenberger on the temperature which may advantageously be adopted in the use of baths in febrile affections. We give an abstract of the article.

For more than a year, M. Schützenberger has conducted his investigations. So long as the heat, one of the symptoms of fever, remains below $39^{\circ}05$ cent. (103° Fahr.), even when the pulse is high, no serious danger may be looked for to the economy. But when the temperature rises to 104° and beyond, it becomes in itself dangerous to the organism; it shows that an active combustion is going on among the tissues, which causes their rapid destruction, so long as the fever continues. In order to diminish the heart's action and to lower the temperature, recourse has been had to digitalis and to methods of external refrigeration, applied in different ways. It has been noticed that, if the baths at 15° to 20° (59° to 68° Fahr.) produce a marked depression of the heat, this advantage is counterbalanced by serious inconveniences. Many of the sick are seized, immediately after their introduction to the cold water, by a chill; the use of the bath becomes disagreeable to them and they refuse it altogether. In addition, serious attacks of pneumonia, with the occurrence of plastic exudation, often supervene on the use of the cold bath.

To avoid these dangers, M. Schützenberger advised the use of tepid baths, of which the temperature varies from 22° to 27° (71°

to 80° Fahr.). During the years 1870-71, these baths have constituted the principal treatment of those under his care suffering from typhoid fever; of those, at least, whose temperature, rising above 39.5° (103° Fahr.), demanded active treatment. The simple and mild cases, in which the temperature did not exceed this point, were left to themselves. The baths were continued for fifteen or twenty minutes, until the supervention of the, so-called, goose-flesh, or a chill. A lowering of the temperature, varying from $.5^{\circ}$ to 1° , was always noticed within half an hour from the bath; in some cases this lowering of the temperature even reached 1° or 2° ; and, in a few cases, it was not materially changed. In one case, which had been more carefully watched on account of the unusual symptoms developed, the bath caused an increase of the temperature.

The lowering of the temperature observed after the bath, continued in the majority of cases, during the remainder of the day; but, on the next day, a fresh elevation of temperature obliged a return to the bath. After a certain number of baths, the thermometer showed that the temperature did not return to the point reached before the use of the bath. By continuing the bath thus methodically, M. Schützenberger has been able to keep the fever within normal limits, that is below a temperature of 39° (102° Fahr.).

The favorable influence of the baths has been noticed in other symptoms than the heat alone. The nervous phenomena—delirium, insomnia and the like—have diminished in their intensity, the tongue has become clean, the abdominal disturbances have been decreased, meteorism has not supervened, and, when it has already been present, it has yielded quickly to cold compresses. As an addition to the treatment, cold was applied to the head, cold drinks were used, and quinine prescribed to the extent of 20 to 30 centigrammes daily. The diet consisted of milk and broth, when the condition of the tongue allowed.

By this method of treatment, the statistical results obtained in the cases of typhoid fever during the year 1870 were re-

markably favorable. Of 38 patients, one died, during convalescence, from bedsores; the remainder recovered.

M. S. has noticed, in like manner, that tepid baths have been equally efficient in many cases of periperal fever, due to perimetritis, in periuterine abscesses and the like, in which the temperature was raised to 42° (107.6° Fahr.), and injections of quinine were inert. Baths given to the number of five in twenty-four hours, produced a rapid diminution of the temperature and amelioration of the symptoms. In variola baths have also produced favorable results; but, in this case, tepid baths have been more beneficial than cold. In certain cases of scarlatina, baths at 15° to 20° have appeared to exert a favorable influence on the disease.

It is known that Troussseau favored the use of baths at a temperature of 25° (77° Fahr.) in scarlatina. The water, which was not cold, except relatively to the temperature of the patient—which rose to 41° (105.8° Fahr.) in the axilla—produced wonderful physiological results. Under its influence the burning heat of the skin gave place to a pleasant moisture, the pulse fell from 10 to 40 pulsations, the vomiting and diarrhoea ceased, nervous symptoms disappeared, and, instead of being pale, the skin took on the rosy hue usually seen during the eruptive stage of the disease.

MEDICAL RELIEF COMMITTEE IN CHICAGO.—From the *Chicago Medical Examiner* we learn that the committee appointed in October last to receive and distribute contributions made for the benefit of the Chicago physicians have completed their duty and made their report. The gross amount of money received was \$9,881.08; of which sum, \$32.50 had been employed for necessary expenses, and the remainder had been appropriated to the relief of 91 practising physicians and 21 medical students, in sums varying from \$30 to \$350. The money had not been appropriated all at once, but from time to time, as often as a sufficient sum accumulated in the treasury. In addition to the money, the committee had received about 70 volumes of medical books, sundry surgical instruments, and, from Dr. Rauch, of Chicago, 40 tons of coal.

TONER'S MEDICAL REGISTER AND DIRECTORY OF THE UNITED STATES.—This volume, the work of years, by the eminent statistician, Dr. J. M. Toner, of Washington, has been put into the hands of Dr. S. W. Butler, of Philadelphia, for speedy publication. It is believed that it will supply an important want long felt by both the medical profession and the public.

The present volume, although not as complete in all respects as its author could wish, contains what can be found nowhere else—the names of over fifty thousand American physicians, arranged in alphabetical order, with their post-office address.

In addition to the names of physicians in practice, the work contains the names and location of all the medical colleges, hospitals and institutions of the country, the asylums for the insane and inebriate, and the names of the medical gentlemen connected with each of them. Also the names of all the medical societies, state, county, city or local, with the names of their officers, and time and place of meeting, so far as the data can be obtained.

Much other information of general interest to the profession is also given, which makes the Medical Register and Directory a valuable hand-book to every physician.

The publisher states that from 60,000 to 75,000 circulars have been mailed to physicians throughout the country, asking personal data for the completion of the Register. Physicians, wherever resident, are invited to send at once such facts concerning themselves as may be made useful.

EXTRACT FROM A CLINICAL LECTURE ON HOMOEOPATHY, delivered at the Hôpital Beaujon, by A. GUBLER, Physician of the Hospital and Agrégé of the Faculty of Medicine.—Certain it is that neither of the great principles brought forward by Hahnemann bears discussion. The first, that of *similia similibus*, becomes untenable as soon as misunderstandings are put an end to by a rigorous definition of terms and by a sounder interpretation of facts. The second, that of infinitesimal doses, absurd on its face, entails a practice as ridiculous as charlatanic.

What, then, does the new system of medicine retain? It retains, alas! its pretence of a power to heal. The homeo-

paths have announced brilliant successes, they have sought to meet the true physician in the field of observation and of experience. He, relying on the strength and justice of his cause, has not refused to the new doctrine the ordeal of experiment, and the ordeal has been unfavorable to it. At Paris as at Naples and St. Petersburg, under the eyes of Andral as before the Russian Areopagus, homeopathic medicaments, administered often by conscientious partisans, have produced in the course of disease no modification attributable to their special virtues. More recently, some homœopaths have voluntarily submitted to the same trial, with no better results.

Reason and experience, then, unite in condemning this medical heresy. Still the sect keeps alive, and, to a certain extent, in fashion. For homeopathy is so conveniently practised. It requires no knowledge of anatomy or of pathological physiology, no power of diagnosis; the patient tells you what he feels, you open a sort of dictionary till you find an analogous bunch of symptoms, and you administer several spoonfuls of water. Any water-carrier who can read would be able to accomplish just as much. And you have no responsibility, for if you let your patients die you cannot at any rate be said to have killed them. Moreover, among a number of physicians who share a comparatively unprofitable practice, the title of homœopath confers on you a sort of distinction and gives you a chance to feather your own nest.

Amid the general public homœopathy finds its own predestined devotees; but not among laborers or mechanics, whose safeguard is their sound common sense, nor among intelligent workers, to whatever rank of society they belong. It draws on the class of the indolent rich, whose habitual worship of self renders them at once unfaithful to their physician and an easy prey to the prowling charlatan. It especially affects ladies of fashion, eager for novelty, restless for the marvellous and inclining to superstition.

In every age it has been found necessary to meet these wants of the advanced portion of society. The eighteenth century had the bath of Mesmer; and we, infinitesimal doses, tipping tables, rapping spirits and mediums.

Is, then, homœopathy nothing but a vast illusion and a prodigious mystification? Did Hahnemann only create dupes and bring nothing useful to light?

By no means. True medicine has been served by the new doctrine in a manner

none the less real for having been involuntary and unwitting. It has been the point of departure of a reaction against the weeping system of medication that preceded it. It is a standing protest against the incessant, immoderate and brutal intervention of dynamic pharmacology.

Prescribing as it does alleged remedies in metaphysical doses and a condition of nonentity, it has caused traditional medicine to display ingenuity in the invention of preparations at once more agreeable and more convenient; it has given an impetus to the separation of alkaloids and active principles. The granules of our apothecaries have entered the lists against the globules of Hahnemann.

In casting aside the weapons belonging to our arsenal of therapeutics, homœopathic medicine has directed its attention to the influences furnished by a salutary regime, demonstrating to us the important effects of general hygiene on the cure of disease.

Moreover, under the pretence of expectant treatment, homœopathy has rendered us its possibly greatest service in improving our acquaintance with the natural course of disease, in enabling us to revise the doctrines of the critical and dictatorial past, and in giving us a more rational appreciation of the properties of drugs, the power of art, and the sources of therapeutic indications.

In fine, fantastic as were the revelations of the first experimenters, imperfect as were their explanations of the phenomena observed, the school of Hahnemann has actually contributed to the knowledge of the physiological action of drugs.

Thus homœopathy, which promised to prove a stumbling block, has turned out, I will not say an instrument but a means for advancing true medicine.

With this crumb of consolation, I gladly bring my remarks to an end. I had rather search for extenuating than aggravating circumstances in the records of an erroneous system that is now on the wane, already in a measure deserted by a large number of its former partisans, and destined sooner or later to vanish before the progress of science as darkness before dawn.—*Gazette des Hopitaux.*

A DIAGNOSTIC SIGN OF PHTHEIRIASIS.—Dr. Tilbury Fox contributes to the *Amer. Jour. of Syphilography and Dermatology* a communication on the diagnosis of phtheiriasis as distinguished from prurigo, from which we quote as follows:—

"The disease, in my opinion, should be described as consisting of a pathognomonic lesion, and secondary symptoms due to the irritation set up and the scratching practised by the patient.

"It is generally, I may say universally, supposed that pediculi bite. This is altogether a mistake. The pediculus has, as shown by Schjödte, a species of sucking apparatus, and not a mouth with mandibles.

"The sucker is put into a follicle, and blood is sucked away. The follicle is slightly dilated by the act of sucking, and when the sucker is withdrawn blood "wells up" and fills the follicle, producing a minute, at first bright, red speck, which soon darkens, the size of a pin point, or that of the dot over the letter i in the type of this journal, or slightly larger, not raised, not removable by pressure. This minute haemorrhagic speck, if carefully examined, is seen to be produced of dried blood, in the somewhat dilated follicle, whose opening often looks like (*i. e.*, if the pediculus has recently entered it with its sucker) a little cupped depression. Presently the healing process restores the follicle to its normal size and state, and only a fine, very minute blood scale remains, which falls off, or can be picked off, leaving behind no sign of mischief.

"These minute specks are quite distinct from scratched follicles, which are larger, raised to sight and touch, and surrounded by an irregularly-shaped excoriation and large blood scales.

"They are pathognomonic of the attack of pediculi as much as the acarian furrow is of the acarus.

"When a patient is attacked by pediculi in abundance, the little specks stud the surface in abundance, and then we readily notice how perfectly uniform in size and appearance they all are, which cannot be said of excoriations or scratched inflamed follicles.

"I am in the habit, where I cannot detect pediculi in clothes, of treating cases in which the "haemorrhagic specks" occur as cases of phtheiriasis, and with eminent success. In fact, I now never care to hunt in the clothes for pediculi, save for teaching purposes. The recognition of the lesion I have described as pathognomonic of phtheiriasis throws a new light on many cases of children and young persons who are supposed to be suffering from "pruriginous eruptions" and "lichen urticatus," though, of course, the latter disease is a distinct and substantive malady. I am

sure many cases of phtheiriasis are often mistaken for it."

UREA FORMED IN THE LIVER.—Next to the formation of the urea, physiologists are most interested in the *place* of its formation. Is the urea first made in the blood, and have the kidneys only to eliminate it? Or are the kidneys the place where it takes its origin? To solve this contested question, N. Gréhant repeated in C. Bernard's laboratory the following decisive experiments. He extirpated both kidneys of a dog, and found, after this operation, that the blood contained more urea than before. The same results followed the placing of ligatures on the ureters. Both experiments proved the accumulation of urea in the blood.

If the blood of the renal vein and artery of a perfectly healthy kidney be examined, it will be found that the venous blood contains less urea than the arterial, which shows us that some urea is lost during the passage of the blood through the kidneys. If the two ureters are tied so that no urea can be eliminated, the blood in the veins and arteries contains the same percentage of urea. This is an indisputable proof that the urea is not formed in the kidneys, otherwise the venous blood would contain more urea than the arterial. The great mass of urea in the blood after the extirpation of the kidneys proves the same, for if this were not true the production of urea would cease after the kidneys have been extirpated. To determine the quantity of urea, Gréhant used Millon's fluid.

Induced by the observations of Gréhant, Cyon attempted to prove that urea is produced in the liver. To this end blood was taken from the carotid of a dog which had not been narcotized, quickly defibrinated, and a part of it placed in an apparatus by means of which it was to be forced through the liver. These tubes were introduced respectively into the *vena cava inferior*, *arteria hepatica*, and *vena portæ*, then the liver cut out of the body and placed in a vessel heated to the temperature of the blood. The first tube was connected with an aspirator, the second and third with the above-mentioned apparatus, in which the blood was contained. The circulation of the blood through the liver could be kept up by means of a connecting tube, which returned the blood on its arrival in the aspirator into the first vessel, from which it could be again forced through the liver.

After the blood had been several times passed through the liver, it showed a greater percentage of urea than a like quantity of the active blood of the same animal. Cyon draws, therefore, the conclusion that the liver is the place of formation of the urea. He promises, at the same time, to follow these short communications with a more elaborate article. (Hr. E. Cyon, "Ueber Harnstoffbildung in der Leber," Centralblatt für die medicinischen Wissenschaften, 1870, No. 37, p. 580.)—*Brit. & For. Med.-Chir. Review*, Jan., 1872.

CHLORAL IN THE CURE OF VENEREAL ULCERS.—Soon after the announcement of the employment of chloroform in the treatment of primitive ulcers, either soft or indurated, Dr. Mancesco Accettella instituted a series of experiments which plainly convinced him of the few indications of this preparation in the cure of venereal ulcers. He says:—"While busying myself with similar experiments, Liebreich published his observations on hydrate of chloral as actively hypnotic and anaesthetic. From that time I commenced to adopt that preparation as a local remedy, in concentrated solution, upon ulcers of such ancient date that neither the acid nitrate of mercury, nor the carbosulphuric paste, nor other efficient caustics, had been able to effect a cure. The effects greatly exceeded all my expectations. After the first application the deep parts of the ulcer became detached, healthy and normal granulations sprang up, and the ulcer was transformed into a simple sore, with the usual tendency to cicatrization. In sixty-nine cases in which I applied chloral topically, the following results were obtained: seven ulcerated and obstinate abrasions healed in nine to sixteen days; forty-nine soft ulcers in from eight to fourteen days; three soft ulcers, complicated with diphtheria, in eighteen to twenty-nine days; five soft ulcers, complicated with phagedaea, in twenty-four to thirty-two days; five primitive infectious ulcers, in fifteen to twenty days. Among the cases of phagedenic ulcers it is necessary to note two, which, for twelve or fifteen months, had resisted all local and general treatment, although the two women affected had the most fresh and florid constitutions. The solution employed was as follows:—chloral hydrate, five gram.; aqua. destil., gram. twenty. This, applied with a pencil to the ulcerated surface, slightly cauterizes, without producing discomfort to the patient. After two or three applications all un-

healthy appearance at the bottom of the ulcer disappears, and the sore presents a bright redness which soon produces the most healthy granulations. A considerably diluted solution should be adopted for the cure of abrasions and simple ulcers. Venereal therapeutics may therefore welcome chloral as a topical remedy, *par excellence*, in the gravest form of ulceration, the phagedenic.—*Gazetta Medica Ital. Lomb.*, No. 31, 1871.

ICE IN THE RECTUM FOR RETENTION OF URINE.

—Dr. Cazenave, of Bordeaux (*Journal de Med. et de Chir.*, May, 1871, quoted in the *Med. and Surg. Reporter*), says that during twenty years, the following simple expedient has never failed in giving relief in retention of urine. He introduces into the rectum a piece of ice of the form of an elongated oval, about the size of a chestnut, which he pushes up beyond the sphincters, and renews every two hours. Almost always, in an hour and half or two hours at longest, urethral spasm ceases, a certain quantity of urine is passed, and the bladder is emptied without effort by the patient. If in rare and exceptional cases this does not take place, he again introduces pieces of ice into the rectum, and also places broken ice from the anus up to the end of the penis, until the urine flows, which it infallibly does. When there is difficulty in making water, occasioned by prostatic hypertrophy, the good effects of the ice are rather longer in coming on, but almost always are produced. In short, in these circumstances (strictures and prostatic hypertrophies), the sedative effects are so well marked, thanks to the effects of the ice, that the introduction of bougies and sounds into the bladder and urethra is always rendered easy to practised surgeons, and hardly any pain is felt. In our Chronicle for May we mentioned Dr. Baillie's statement, that ice per rectum was invaluable in the narcosis of chloroform. We have now to add that the same mode of using the same agent has been reported on for retention.—*Pacific Med. and Surg. Jour.*

A FACT FOR LANDLORDS.—The Metropolitan Association for Improving the Dwellings of the Working Classes, in the eleven properties it now has, affords house room to 3,934 persons. During the year 1870-71, the death-rate of the metropolis averaged 24 per 1,000, but in these select dwellings it only reached 17 per 1,000.—*Brit. Med. Journal*.

Medical Miscellany.

At the annual meeting of the Obstetrical Society of Boston the following gentlemen were elected officers for the ensuing year:-

President, Dr. Wm. Read; *1st Vice President*, Dr. S. L. Abbot; *2d Vice President*, Dr. James Ayer. *Treasurer*, Dr. C. D. Homans. *Recording Secretary*, Dr. W. L. Richardson; *Corresponding Secretary*, Dr. L. Parks, Jr. *Prudential Committee*, Drs. C. G. Putnam, C. E. Buckingham, B. E. Cotting, A. D. Sinclair.

MIDDLESEX SOUTH DISTRICT MEDICAL SOCIETY.—The Society met at Cambridge, April 17th. The following list of officers was elected by ballot:-

President, Morrill Wyman; *Vice-President*, W. W. Wellington. *Secretary*, C. E. Vaughan. *Treasurer*, J. W. Willis. *Censors*, S. W. Driver, Z. B. Adams, H. P. Walcott, B. F. D. Adams, L. Woods. *Commissioner on Trials*, Howland Holmes. *Councillors*, W. W. Wellington, R. S. Warren, Jeffries Wyman, H. A. Barrett, A. H. Blanchard, J. C. Dorr, R. L. Hodgdon, A. P. Hooker, T. P. Robinson, W. B. Morris, G. J. Townsend, J. T. G. Nichols, Alfred Hosmer, G. C. Lincoln, Z. B. Adams.

The Society decided, by a large vote, not to send delegates to the meeting of the American Medical Association.

APPOINTMENTS.—Dr. Francis B. Greenough has been elected one of the surgeons, and Dr. W. H. Hastings one of the physicians at the Central Office of the Boston Dispensary.

Dr. A. L. Haskins has been appointed Physician to out-patients at the Boston City Hospital.

THE FIRST MEDICAL JOURNAL ever published was the *Zodiaco Medicus Gallicus*, a French monthly periodical, edited by Dr. Nicholas de Bligny. It appeared in 1680, and its editor subsequently became physician to King Louis XIV. Its success was somewhat ephemeral, owing, it is believed, to the independent pungency of the critical notices which it contained of the contemporary medical literature. It survived four years, but lived long enough to become the patriarchal prototype of an innumerable line of medical periodical literature. The credit of this research for the protoplasm of medical journalism belongs to the *Medical and Surgical Reporter*.

THE INVALID'S DINNER TABLE.—They have at Cardiff, in England, an institution whose object is to provide sick or sickly men, women and children of the poorer class a good meal once a day of food well cooked, the recipients of the benefaction dining together as far as may be at one table. The meal is provided three days in the week the year round. A half penny gives the privileges of this dinner to those who meet around the board, and twopence is exacted from those who prefer to dine alone. In connection with this organization there is a club in which those depositing money are entitled to dinners, to the extent of their de-

posit, in times of sickness of themselves or their families—a Dinner Insurance Company, whose benefits are obvious.

THE IMPORTATION OF OPIUM.—The money value of opium imported through the Custom House of New York City, in the year 1871, was \$1,299,091.

TO CORRESPONDENTS.—Communications accepted.—*Anomalous Case of Angina Pectoris*.—A Letter from Vienna.

CORRECTION.—In Journal for April 18, page 256, in title of article, for "prolapsus uterus" read *prolapsus uteri*.

BOOKS RECEIVED.—*The Treatment of Venereal Diseases*; *Monograph on the Method pursued in the Vienna Hospital under the direction of Prof. von Sig mund*. By M. H. Henry, M.D., Surgeon to the New York Dispensary, Department of Venereal and Skin Diseases, &c. New York: Wm. Wood & Co. 1872. Pp. 49. (From James Campbell).—*Lectures on Aural Catarrh*; or the commonest forms of Deafness and their Cure. By Peter Allen, M.D., F.R.C.S.E., &c. New York. 1872. Pp. 277. (From James Campbell.)

MARRIED.—In Boston, 19th inst., Theo. F. Breck, M.D., of Springfield, to Miss Helen Cordelia Townsend, of Boston.

DIED.—In Lynn, 21st inst., of nervous prostration and anæmia, James M. Nye, M.D., aged 53.—In Canton, 21st inst., Ezra Abbott, M.D., 63.

Deaths in thirteen Cities and Towns of Massachusetts for the week ending April 20, 1872.

Cities and Towns.	No. of Deaths.	Prevalent Diseases.
Boston	112	Consumption 45
Charlestown	16	Pneumonia 44
Worcester	29	Scarlet fever 14
Milford	3	Measles 8
Cambridge	14	
Salem	6	
Lawrence	11	
Lynn	10	
Fitchburg	5	
Newburyport	4	
Somerville	4	
Fall River	17	
Haverhill	9	
	240	

Five deaths from smallpox occurred in Boston.

GEORGE DERBY, M.D.,
Secretary of State Board of Health.

DEATHS IN BOSTON for the week ending Saturday, April 20th, 112. Males, 57; females, 55. Accident, 3—apoplexy, 2—inflammation of the bowels, 1—bronchitis, 1—inflammation of the brain, 1—congestion of the brain, 3—disease of the brain, 3—cancer, 1—cerebro-spinal meningitis, 1—cyanosis, 1—consumption, 22—convulsions, 4—debility, 4—dropsy of the brain, 2—diphtheria, 1—scarlet fever, 7—typhoid fever, 2—hernia, 1—disease of the heart, 3—homicide, 1—disease of the kidneys, 2—disease of the liver, 1—congestion of the lungs, 1—inflammation of the lungs, 16—marasmus, 5—measles, 2—old age, 2—paralysis, 1—premature birth, 1—peritonitis, 1—puerperal disease, 3—rheumatism, 1—rupture of the urethra, 1—scrofula, 1—smallpox, 5—suicide, 3—whooping cough, 1—unknown, 1.

Under 5 years of age, 1—between 5 and 20 years, 13—between 20 and 40 years, 34—between 40 and 60 years, 15—above 60 years, 9. Born in the United States, 74—Ireland, 19—other places, 19.